

## **Chapter 2: U.S. Air Force, Strategic Air Command, and Ellsworth Air Force Base (1940s–90s)**

### **Establishment**

Air combat became the dominant brand of warfare during World War II, prompting a major restructuring of American military aviation after 1945. Following establishment of the Strategic Air Command (SAC) in 1946, the National Security Act of 1947 established the U.S. Air Force as an independent branch of the military. These were the institutions that directed America's strategic deterrent through the Cold War. Ellsworth Air Force Base in South Dakota, established in 1942 as an Army airfield, became part of the Air Force and SAC. As the following pages will demonstrate, in the mid-twentieth century SAC activated intercontinental bomb and missile wings at Air Force bases throughout the country that assisted in deterring a major conflict between the world's superpowers. Of course the superpowers battled throughout the Cold War in proxy wars throughout the developing world (in Korea and Vietnam most famously), but the type of awesome destructive power embodied in the Minuteman program was designed for another purpose: for the global thermonuclear conflict no one wanted to fight.

The U.S. Air Force originated as the Aeronautical Division of the Army Signal Corps in 1907. In the words of one official Air Force history, this predecessor oversaw "all matters pertaining to military ballooning, air machines, and all kindred subjects."<sup>i</sup> In subsequent years, the Army Aeronautical Division became the Air Service, the Air Corps, and finally the Army Air Forces, before emerging as the U.S. Air Force.<sup>ii</sup> Aviation strategists argued throughout World War II that an independent airpower branch could best manage the complexities of modern air warfare. American pilots, moreover, chafed at the independent air forces they saw within the British and Soviet militaries. The establishment of the Air Force as an independent agency was the particular vision of General Henry H. Arnold (known to his men as "Hap"), a thirty-nine-year veteran of the United States military. In a report on the conduct of the air war during World War II Arnold suggested "three autonomous services, each of which has an equal and direct share of the total responsibility."<sup>iii</sup> He speculated that a separated Air Force, Army, and Navy would form a balanced military that ensured efficiency by reducing duplicate efforts. On 26 July 1947, when the National Security Act became law, Arnold and those like him finally had their wish, and two months later President Truman appointed W. Stuart Symington as Secretary of the Air Force and General Carl A. Spaatz as the first Chief of Staff.<sup>iv</sup>

When the Air Force separated from the Army, it gained control over all surface-to-surface aircraft and strategic missiles through SAC. While the new service took command of all area air defense missiles, the Army retained control of missiles used to protect Army field forces from air attack.<sup>v</sup> In the 1950s, when the nation entered the Space Age with the development of nuclear strategic weapons and ballistic missiles, the Department of Defense called upon Air Force bases around the country, such as Ellsworth Air Force Base, to operate and maintain bombers and missiles administered through SAC. Air Force personnel began training for new duties as missileers and missile support staff. Today, the Air Force continues to operate Minuteman III and Peacekeeper

Intercontinental Ballistic Missiles (ICBMs) administered by U.S. Strategic Command (USSTRATCOM), SAC's successor.<sup>vi</sup>

To better explore the strategic role of South Dakota's Minuteman ICBMs, a brief history of SAC, Ellsworth Air Force Base, and the 44<sup>th</sup> Strategic Missile Wing (SMW) follows. (A chart outlining the organizational structure of the U.S. Air Force is located at the end of this chapter.)

## **Strategic Air Command**

The U.S. Army Air Forces established SAC on 21 March 1946 as one of three major combat commands of the agency. While the Air Defense Command provided protection for the continental United States and the Tactical Air Command supported the Army and the Navy in the field, SAC, the offensive branch, became the foundation of the nation's defense against the growing threat of atomic war.<sup>vii</sup> SAC became a part of the Air Force in 1947, but continued its role as chief administer of all of the military's strategic nuclear weapons and central communication node for deployment of these powerful weapons.

Located first at Bolling Field in the District of Columbia, SAC's headquarters quickly moved to Andrews Air Force Base in Maryland. Initially, SAC was comprised of the 8<sup>th</sup> Air Force, headquartered at Fort Worth, Texas, and the 15<sup>th</sup> Air Force, headquartered at Colorado Springs, Colorado, and included eighteen bases and nine bomber groups. The command's first atomic weapon operation was "Operation Crossroads," which tested the effects of air-dropped and submerged atomic detonations on naval targets off the Bikini Islands in the South Pacific.

With expanding responsibilities, however, SAC eventually required larger facilities. In November 1948 the Air Force relocated SAC Headquarters to Offutt Air Force Base in Bellevue, a suburb of Omaha, Nebraska, well beyond the existing nuclear range of the nation's enemies at that time. Remaining in the Washington, D.C., area would have interrupted SAC's training missions, due to the existing heavy air traffic in the area. Furthermore, although forty bases were candidates for SAC's new headquarters, Offutt provided a good mid-continent location that had existing runways, large hangars, and support facilities. The organization's successor USSTRATCOM remains headquartered at Offutt to this day.<sup>viii</sup>

With the outbreak of the Korean conflict in 1950 and subsequent invention of the hydrogen bomb—a device capable of creating a far greater destructive force than the bombs that devastated Hiroshima and Nagasaki—the arms race between the superpowers significantly accelerated. President Eisenhower called for a reexamination of the national defense upon entering office in 1953, and his demand, made partly to alleviate the country's need for an expensive massive standing army, resulted in an increased reliance on nuclear weapons and air power to deter warfare. His administration consequently invested more of the nation's defense funding in the Air Force than his predecessors had, and much of this new money went to SAC. While retaining key elements of the nation's security policy devised under President Truman, such as the doctrine of containment, the Eisenhower Administration publicly advanced a policy of "massive retaliation" in

which the U.S. would not limit its response to future aggression.<sup>ix</sup> Soviet military incursions into Europe, for example, would be met by nuclear strikes at Moscow. If such an awful event came to pass, SAC would deliver the blow. By the end of 1953 it administered seventeen atomic wings, eleven of which were equipped with armed bombers and crews, and the number of personnel continued to grow. In the 1950s SAC personnel grew from 85,000 to 262,000, many of whom were civilians employed for SAC support.<sup>x</sup>

Armed with the mission of deterring aggression, SAC employed both air- and surface-launched guided missiles. Air-launched missiles included the Quail and Hound Dog fired from the B-52 bomber and the Short Range Attack Missile, launched from the B-52 and the FB-111. Surface-launched missiles included the Snark, the Thor and Jupiter intermediate range ballistic missiles, and the Atlas, Titan, and Minuteman ICBMs.<sup>xi</sup> By the 1960s the combination of the Air Force's bombers and ICBMs with the Navy's missile-launching submarines formed SAC's "triad" in deterring nuclear warfare against the nation.<sup>xii</sup> With three nuclear options, American strategists reasoned, no foe would be able to silence America's potential nuclear response.

While SAC oversaw these programs and made decisions regarding bombers and missiles, the Air Force bases supported the organization's installations. Although the Air Force operated and maintained the missiles, SAC gave all orders pertaining to strategic weapons in the military; including wing assignments and which military bases would be assigned nuclear weapons. SAC decided on the location of ICBM installments, assigned squadrons, and installed missiles near existing Air Force bases to take advantage of their support facilities. SAC also gave orders on the proximity of ICBMs to other silos and communities.

SAC commanders determined when strategic bombers and ICBMs were activated, when they were placed on alert or heightened alert status, and when they were deactivated. For example, during the Cuban Missile Crisis in October 1962, SAC required for the first time that all twelve Series F Atlas ICBMs go on alert at four Strategic Missile Squadrons (SMS), including the 550<sup>th</sup> SMS at Schilling Air Force Base in Kansas, the 551<sup>st</sup> SMS at Lincoln Air Force Base in Nebraska, the 577<sup>th</sup> SMS at Altus Air Force Base in Oklahoma, and the 578<sup>th</sup> SMS at Dyess Air Force Base in Texas.<sup>xiii</sup> A decade later, in October 1973, SAC placed the 44<sup>th</sup> Strategic Missile Wing (SMW) at Ellsworth Air Force Base on increased alert status as a result of anticipated Soviet interference in the Arab-Israeli War.<sup>xiv</sup> Of course, the execution of these commands came only at the order of the President and his National Security Council.

Another duty of SAC in overseeing the Minuteman program was determining the effectiveness of the Air Force's combat crews. SAC assigned an Inspector General (IG) to each Air Force base. Each IG would perform Operational Readiness Inspections (ORI) at ICBM Launch Control Facilities (LCFs) at their base. The first ORI took place at the 706<sup>th</sup> SMW at F.E. Warren Air Force Base in Wyoming in July and August 1961. While SAC rarely distributed excellent ratings, Ellsworth's 44<sup>th</sup> SMW received several excellent scores throughout its history.<sup>xv</sup>

Throughout its existence, according to Air Force lore, SAC's emblem and motto symbolized the institution's goals. The emblem was a sky-blue,

shield-shaped image with an armored arm grasping a green olive branch and three red lightning bolts. Official histories note that the blue background represented Air Force operations, while the armored arm symbolized strength, power, and loyalty. The olive branch symbolized peace and the lightning flashes represented speed and power, all qualities of SAC's mission. The group's original motto, "War is our profession-Peace is our product," proved offensive to some, however, and the slogan was changed to "Maintaining Peace is our Profession." The Air Force changed the motto once more in 1958 (after an artist found there were too many words to paint on a sign that advertised a reenlistment campaign), choosing the pithier "Peace is our Profession."<sup>xvi</sup>

All discussion of slogans and emblems aside, SAC proved a uniquely dedicated and motivated organization throughout its history. Its crew, staff, and pilots believed their work necessary to maintaining the peace, and to deterring Soviet aggression worldwide. In its early years especially, under the leadership of its hard-charging commander General Curtis LeMay, SAC's personnel developed a reputation for working harder, faster, and longer than the bomber wings that preceded it. Its planes set records for endurance in the air, and maintained a constant presence in the skies in case of surprise Soviet attack. LeMay's reputation as a military hawk, and his belief that nuclear war could be won-at a time when many leaders, Eisenhower in particular, considered nuclear war a sure loser for all-later prompted criticism from historians, peace activists, and even his political superiors. President John Kennedy, for one, never forgot or apparently forgave the General for advocating immediate bombing missions at the height of the Cuban Missile Crisis, advice the President believed would have led directly to the nuclear war he strove to avoid. Indeed, even movie directors lampooned LeMay, as the bombastic and paranoid General Buck Turgidson (played by George C. Scott) of Stanley Kubrick's 1964 *Dr. Strangelove or How I Learned to Stop Worrying and Love the Bomb* was modeled after the SAC Commander. He preferred to cultivate another image, that of the hard-working and dedicated public servant, charged with a mission others neither liked nor would accept, the kind of commander pictured in the Jimmy Stewart classic film, 1955's *Strategic Air Command*. LeMay and SAC aided in the production of the latter, even assigning a colonel as the movie's technical director. Not surprisingly, *Dr. Strangelove* never received the Air Force's official endorsement. Nine years (and successive world crises such as Berlin and Cuba) made quite a difference in cinematic portrayals of SAC and its commander.<sup>xvii</sup>

With the fall of the Berlin Wall and the end of the Cold War, SAC was officially deactivated 1 May 1992 and was replaced by the U.S. Strategic Command, known as USSTRATCOM. On 1 October 2002 USSTRATCOM and U.S. Space Command both disestablished and a new U.S. Strategic Command stood up at Offutt Air Force Base, responsible for both missions.

## **Ellsworth Air Force Base**

One Air Force Base under SAC's administration was Ellsworth Air Force Base near Rapid City, South Dakota. Although Ellsworth became a significant SAC Air Force base, operating and maintaining both bombers

and missiles, its history predates the atomic age. The U.S. War Department established the Rapid City Army Air Base, which eventually became Ellsworth Air Force Base, in January 1942. Shortly after the U.S. joined World War II the base served as a training location for B-17 Flying Fortress crews. Weather reconnaissance and combat squadrons briefly trained at the base after the war, until operations ceased in September 1946. When the base reopened in March 1947, the 28<sup>th</sup> Bombardment Wing (BW) with the flying B-29 Superfortress was stationed at the Rapid City Army Air Base.<sup>xviii</sup>

In January 1948 the Air Force Chief of Staff, General Carl A. Spaatz, renamed the installation Weaver Air Force Base in honor of Brigadier General Walter R. Weaver, a pioneer in Air Force development. Five months later, at the public's request, the base was returned to its original name, Rapid City Army Air Base. However, President Eisenhower traveled to South Dakota in 1953 for yet another ceremony renaming of the air base. This time, the base was named in memory of Brigadier General Richard E. Ellsworth, commander of the 28<sup>th</sup> Strategic Reconnaissance Wing, and one of twenty-three crewmembers who perished in a plane crash over Newfoundland in March of that year.<sup>xix</sup>

Over the years SAC continuously reassigned units to Ellsworth and upgraded facilities, manpower, and technology on the base. Ellsworth Air Force Base officially began its role in the Space Age in 1960 with the construction of Titan I ICBM facilities. The 850<sup>th</sup> SMS, originally assigned as the 28<sup>th</sup> BW, was assigned to operate and maintain the Titans. Two years later SAC activated the 44<sup>th</sup> SMW, and within that the 66<sup>th</sup> SMS was the first of three squadrons to operate 150 Minuteman I ICBMs throughout western South Dakota. The 44<sup>th</sup> SMW, whose motto was "Aggressor Beware," not only hosted two generations of ICBMs-Titan and Minuteman I-but was the only wing to have two generations at that time. Furthermore, after SAC activated Minuteman II ICBMs in the early 1970s, the base was known at the "Showplace of SAC" for their operation and maintenance of two of SAC's "triad" of nuclear deterrence, strategic bombers and Minuteman II ICBMs.<sup>xx</sup>

With advancements in missile technology, as well as the evolution of the Cold War, Secretary of Defense Robert McNamara ordered SAC to accelerate the phase-out of the Atlas and Titan I ICBMs on 16 May 1964. By February of the following year, SAC had removed all Titan I missiles from their silos at Ellsworth, leaving only Minuteman I ICBMs.<sup>xxi</sup> To prove the ability of Minuteman crews and the missiles, McNamara then approved "Project Long Life," a series of operational tests hosted by Ellsworth Air Force Base. The program called for a realistic test of the Minuteman IB system through short-range base launches of three modified ICBMs. The first test missile, loaded with enough propellant for a seven-second flight and a range of approximately two miles, was launched from Launch Facility (LF) November-02 on 1 March 1965 at Ellsworth and was the only Minuteman missile ever launched from an operational silo. "Project Long Life" demonstrated the ability of SAC's missile crews to actually launch Minuteman ICBMs, and marked an important moment in the history of the Minuteman project.<sup>xxii</sup>

When SAC finished converting the Minuteman I missiles in South Dakota to Minuteman II ICBMs in 1973, Ellsworth Air Force Base was selected to host the "Giant Pace Test 74-01." This program administered the first Simulated Electronic Launch-Minuteman (SELM) exercise. During the test

missileers successfully simulated the launch of eleven SELM-configured missiles on the command of both underground LCFs and the Air Force's Airborne Launch Control System.<sup>xxiii</sup> This test proved the effectiveness of the Minuteman's communications systems, a key component for a weapon designed to operate in a crisis situation under the most stressful conditions.

By the mid-1980s major changes were taking place at Ellsworth Air Force Base. The Air Force began deactivating the maturing fleet of B-52s and started to prepare the 28<sup>th</sup> Bombardment Missile Wing (BMW) for a fleet of B-1B Lancer bombers. In 1986 the Air Force hired contractors to construct dormitories, security police headquarters, and maintenance facilities for the supersonic craft. They also revamped the runway. By January 1987 Ellsworth accepted the first of thirty-five new bombers.<sup>xxiv</sup>

Changes continued into the 1990s at Ellsworth Air Force Base. The signing of the Treaty Between the United States of America and the Union of Soviet Socialist Republics on the Reduction and Limitation of Strategic Offensive Arms (START Treaty) in July of 1991 significantly affected the base's operations. On 27 September 1991 President George H. W. Bush ordered the removal of all Minuteman II ICBMs from alert status. The Air Force took the missiles off alert immediately and began removing them from the underground silos. In 1991 the Air Force began deactivation procedures and later dismantlement, including imploding the empty LFs and dismantling the LCFs.<sup>xxv</sup> The START Treaty allowed for the preservation of an LCF and LF to serve as an interpretive tool. LCF Delta-01 and LF Delta-09 of Ellsworth Air Force Base, the subjects of this study, were chosen to be preserved for interpretation. Ellsworth remains an operational base to this day, home of the 28<sup>th</sup> Bomb Wing.

#### **44<sup>th</sup> Strategic Missile Wing**

One of SAC's several missile wings during the Cold War included the 44<sup>th</sup> SMW, based at Ellsworth. This wing maintained both Titan and Minuteman missiles through its thirty-year tenure in South Dakota, and a brief history of the 44<sup>th</sup> and its strategic squadrons follows.

The 44<sup>th</sup> SMW originated as the 44<sup>th</sup> Bombardment Group (BG) on 20 November 1940, a unit first activated in January of 1941 at MacDill Field in Florida. The Air Force soon thereafter moved the 44<sup>th</sup> BG to Barksdale Field in Louisiana. Known as the "Flying Eight Balls," the group was equipped with the B-24 Liberator, a four-engine long-range bomber. After serving in World War II the 44<sup>th</sup> BG was deactivated and reactivated several times. On 1 January 1962 the Air Force deactivated the 44<sup>th</sup> BG a final time, though it was redesignated that same day as the 44<sup>th</sup> SMW at Ellsworth Air Force Base under the command of the 821<sup>st</sup> Strategic Aerospace Division, headquartered at the base.<sup>xxvi</sup>

SAC assigned four strategic squadrons to the 44<sup>th</sup> SMW, including three Minuteman squadrons—the 66<sup>th</sup>, 67<sup>th</sup> and 68<sup>th</sup> – and one Titan squadron, 850<sup>th</sup>. The wing received its first operational Titan missile on 22 June 1962.<sup>xxvii</sup> The other squadrons originated as the 66<sup>th</sup>, 67<sup>th</sup>, and 68<sup>th</sup> Bombardment Squadrons (BS) in the fall of 1940 at MacDill Field in Florida, where they too were equipped with Liberator bombers.<sup>xxviii</sup> In addition to the four SMSs, the 44<sup>th</sup> SMW also employed several support units at Ellsworth Air Force Base. The Missile Wing Command Section

included the 44<sup>th</sup> Missile Wing Commander and Vice Commander who oversaw missile combat crews and the support staff. The 44<sup>th</sup> Maintenance Support Squadron provided administrative support and training of maintenance groups that serviced the missiles and their facilities. The 45<sup>th</sup> Missile Security Group and the 44<sup>th</sup> Missile Security Squadron had the task of securing the missile sites and protecting them from sabotage.

On 1 July 1962 SAC activated the first of South Dakota's Minuteman squadrons near Wall. The Minuteman I ICBMs were assigned to the 66<sup>th</sup> SMS, including fifty officers and two enlisted members.<sup>xxix</sup> The Air Force only allowed officers to serve as launch crews, hence the unusual ratio of ranks. When the Air Force activated the 66<sup>th</sup> SMS they also activated SAC's first Minuteman IB squadron. Minuteman's first variant, IA, contained a flawed first stage that reduced its range by two thousand miles. Rather than stall the nation's defense effort, SAC approved the installation of the flawed 150 Minuteman IA ICBMs at Malmstrom Air Force Base. Additional Minuteman I deployments consisted of the upgraded Minuteman IB, with the first 150 missiles activated at Ellsworth Air Force Base.<sup>xxx</sup>

The Boeing Company installed Ellsworth's first Minuteman IB ICBM in February 1963 in the Bravo flight of the 66<sup>th</sup> SMS.<sup>xxxi</sup> The squadron's first Minuteman missile was activated in April 1963 and the first total flight of ten missiles was activated 20 June 1963.<sup>xxxii</sup> The 67<sup>th</sup> SMS was located around Union Center, northeast of Rapid City, and the 68<sup>th</sup> SMS was situated around Belle Fourche, northwest of Rapid City. The last Minuteman I ICBM flight was accepted by the 44<sup>th</sup> SMW on 23 October 1963.<sup>xxxiii</sup> SAC declared all three of Ellsworth's Minuteman SMSs combat ready on 1 November 1963, and ordered all of its Titan I ICBMs deactivated soon after. By February of 1965 all nine Titan missiles at Ellsworth were removed from their silos. One month later, on 25 March 1965, SAC deactivated the 850<sup>th</sup> SMS.<sup>xxxiv</sup>

As technology advanced, so did the need to improve training. In November 1965 the Air Force installed Ellsworth's first Missile Procedures Trainer (MPT) to help missileers of the 44<sup>th</sup> SMW meet training requirements. To simulate the later Minuteman II ICBMs, SAC installed a second MPT at Ellsworth in April 1970. The MPT assisted the crews of the 44<sup>th</sup> SMW in competing in the Olympic Arena Competition, a contest between all of SAC's missile wings at Vandenberg Air Force Base in California. In 1970, 1982, and 1992 Ellsworth crewmembers won the coveted Blanchard Trophy for the "Best of the Best." In the following years they frequently claimed other top awards.<sup>xxxv</sup> Other ICBM bases that competed against Ellsworth's 44<sup>th</sup> SMW in the Olympic Arena knew them as the "Black Hills Bandits."

In June 1971, SAC deactivated the 821<sup>st</sup> Strategic Aerospace Division and named the 44<sup>th</sup> SMW the host wing at Ellsworth Air Force Base. The 44<sup>th</sup> SMW was then reassigned under the command of the 4<sup>th</sup> Air Division (AD) at F.E. Warren Air Force Base in Wyoming. Additional organizational changes took place within the 44<sup>th</sup> SMW in 1975. In an effort to increase efficiency and improve missile maintenance, SAC deactivated the 44<sup>th</sup> Missile Maintenance Squadron on 30 September 1975 and activated the Field Missile Maintenance and Organizational Missile Maintenance Squadrons.<sup>xxxvi</sup>

Reorganization and deactivation continued throughout the 1970s and 1980s. In 1982 the 44<sup>th</sup> SMW transferred to the command of the 57<sup>th</sup> AD of Minot Air Force Base in North Dakota and then six years later was transferred to the to the 12<sup>th</sup> AD, relocated to Ellsworth and became the new host unit for the base. When President Bush signed the START Treaty, SAC ordered that all Minuteman II ICBMs be deactivated immediately. Deactivation at Ellsworth Air Force Base officially began when SAC removed the first Minuteman II ICBM from Golf-02 near Red Owl, South Dakota on 3 December 1991. Dismantlement was complete when SAC imploded LF Kilo-06 on 16 September 1996.<sup>xxxvii</sup> The 44<sup>th</sup> SMW formally inactivated on 4 July 1994 during a ceremony at Ellsworth Air Force Base. Colonel Roscoe Moulthrop, the final 44<sup>th</sup> SMW Commander, stated that the inactivation "marked a step back from the brink of nuclear extinction and a step forward into the sunlit world of freedom for our children and their children."<sup>xxxviii</sup> Today, a replica missile at the South Dakota Air and Space Museum, located just outside of the main gate of Ellsworth Air Force Base, and Delta-01 and Delta-09 stand as symbols of Minuteman's thirty-year era in South Dakota.



## Organizational Structure of the Air Force

(in descending order)

Headquarters U.S. Air Force



Major Command



Direct Reporting Unit



Field Operating Agency



Separate Operating Agency\*



Air Forces



Divisions\*



Wings



Groups



Squadrons and Flights

\* - denotes those levels of organization  
that are no longer in use

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**Air Forces**-A tactical level of command in the U.S. Air Force that is subdivided into wings, groups, squadrons, and flights. Air forces were both numbered and named originally, but only numbered air forces are still in existence.

**Wing**-There are three different types of wings: operational, air base, and specialized mission. Operational wings and air base wings are essentially in charge of the maintenance and basic operation of a base. A specialized mission wing has a specific task such as intelligence or training.

**Groups**-Groups represent an intermediate level of command to provide a level of leadership between the squadrons or flights and the wings.

**Squadrons and Flights**-Squadrons and flights are the basic units of the U.S. Air Force. Their purpose can either be functional, such as

performing duties to maintain the  
base, or organized to carry out a  
specific mission.

*Source: "Types of USAF Organizations," 12 October  
2001*

*<<http://www.au.af.mil/au/afhra/wwwroot/rso/organizations.html>> (25 August 2003).*





Plate 19. Transporter Erector at Ellsworth Air Force Base ("Site Activation Chronology, Minuteman Project, Ellsworth Air Force Base, South Dakota, July 1963-October 1963," K243.012-40, in USAF Collection, AFHRA)



Plate 20. Pride hangar at Ellsworth Air Force Base (Courtesy of Ellsworth Air Force Base, Base Historian's Office)



Plate 21. Shield of the 44<sup>th</sup> Strategic Missile Wing at Ellsworth Air Force Base (*44<sup>th</sup> Missile Wing Commemorative Committee, Aggressor Beware: A Brief History of the 44<sup>th</sup> Missile Wing, 1962-1994* (Rapid City, S.Dak.: Greilind Printing, 1993), 1)



Plate 22. Shield of the 66<sup>th</sup> Strategic Missile Squadron at Ellsworth Air Force Base (*44<sup>th</sup> Missile Wing Commemorative Committee, Aggressor Beware: A Brief History of the 44<sup>th</sup> Missile Wing, 1962-1994*, 101)

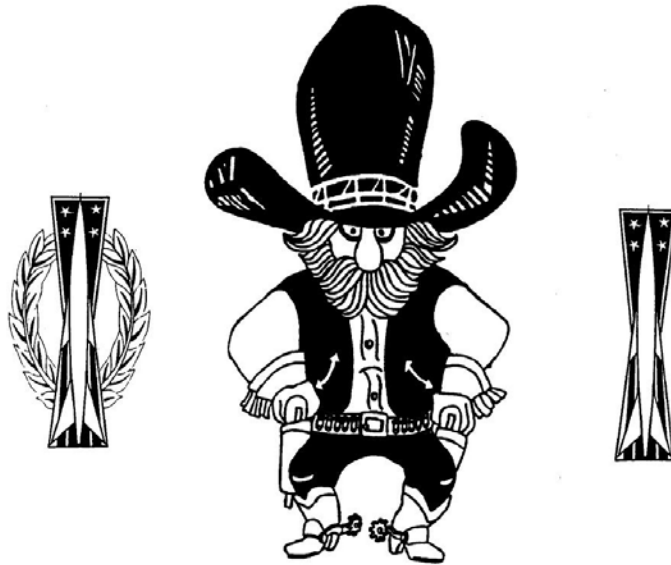


Plate 23. Shield of the 67<sup>th</sup> Strategic Missile Squadron at Ellsworth Air Force Base (*44<sup>th</sup> Missile Wing Commemorative Committee, Aggressor Beware: A Brief History of the 44<sup>th</sup> Missile Wing, 1962-1994, 105*)



Plate 24. Shield of the 68<sup>th</sup> Strategic Missile Squadron at Ellsworth Air Force Base (*44<sup>th</sup> Missile Wing Commemorative Committee, Aggressor Beware: A Brief History of the 44<sup>th</sup> Missile Wing, 1962-1994, 109*)

# The Black Hills Bandits



## 44th Missile Wing

Plate 25. The Black Hills Bandits of the 44<sup>th</sup> Strategic Missile Wing  
(Courtesy of National Park Service)

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- <sup>i</sup> "Air Force History Overview," *Air Force Link*, 9 May 2003, <<http://www.af.mil/history/overview.shtml>> (13 May 2003).
- <sup>ii</sup> Bernard C. Nalty, ed., *Winged Shield, Winged Sword: A History of the United States Air Force*, vol. I (Washington, D.C.: Air Force History and Museums Program, 1997), 371.
- <sup>iii</sup> Nalty, *Winged Shield, Winged Sword: A History of the United States Air Force*, 372.
- <sup>iv</sup> Frederick J. Shaw, Jr. and Timothy Warnock, *The Cold War and Beyond: Chronology of the United States Air Force, 1947-1997*, Air Force Fiftieth Anniversary Commemorative Edition (Washington, D.C.: Air Force History and Museums Program in association with Air University Press, 1997), 2.
- <sup>v</sup> "Strategic Air Command Missile Chronology" (Omaha, Nebr.: Office of the Historian, Strategic Air Command, 2 September 1975).
- <sup>vi</sup> The Peacekeeper missiles are recommended for deactivation by the end of 2003 and the missiles of F.E. Warren Air Force Base are currently being deactivated.
- <sup>vii</sup> Daniel Hoisington, "Headquarters, Strategic Air Command," Historic American Building Record Draft Report (HAPS NO. NE-9-M, N, O) (Washington, D.C.: United States Department of the Interior, National Park Service, May 2001), 9.
- <sup>viii</sup> Hoisington, "Headquarters, Strategic Air Command," 9, 11.
- <sup>ix</sup> "Strategic Air Command," *Global Security*, 2 December 2001, <<http://www.globalsecurity.org/wmd/agency/sac.htm>> (13 May 2003).
- <sup>x</sup> "Strategic Air Command."
- <sup>xi</sup> "Strategic Air Command Missile Chronology."
- <sup>xii</sup> "Strategic Air Command."
- <sup>xiii</sup> "Strategic Air Command Missile Chronology."
- <sup>xiv</sup> 44<sup>th</sup> Missile Wing Commemorative Committee, *Aggressor Beware: A Brief History of the 44<sup>th</sup> Missile Wing, 1962-1994* (Rapid City, S.Dak.: Grellind Printing, 1993), 38.
- <sup>xv</sup> Captain I. P. Owens, "In Search of Excellence," *Combat Crew* 24, no. 4 (April 1974): 16; "Strategic Air Command Missile Chronology."
- <sup>xvi</sup> 44<sup>th</sup> Missile Wing Commemorative Committee, *Aggressor Beware: A Brief History of the 44<sup>th</sup> Missile Wing, 1962-1994*, 33.
- <sup>xvii</sup> Lawrence H. Suid, *Guts and Glory: The Making of the American Military Image in Film* (Lexington: University Press of Kentucky, 2002).
- <sup>xviii</sup> "Ellsworth AFB History," *Ellsworth Air Force Base*, 1 October 2002, <<http://www.ellsworth.af.mil/history.html>> (28 October 2002).
- <sup>xix</sup> "Ellsworth AFB History."
- <sup>xx</sup> "Ellsworth AFB History;" Lieutenant General Thomas S. Moorman, Jr., "44<sup>th</sup> Missile Wing Inactivation" (paper presented at the 44<sup>th</sup> Missile Wing Deactivation Ceremony and Dinner, 3 July 1994), 3.
- <sup>xxi</sup> Lonquest and Winkler, *To Defend and Deter: The Legacy of the United States Cold War Missile Program*, 415.
- <sup>xxii</sup> Lonquest and Winkler, *To Defend and Deter: The Legacy of the United States Cold War Missile Program*, 415; Moorman, Jr., "44<sup>th</sup> Missile Wing Inactivation," 3.
- <sup>xxiii</sup> Lonquest and Winkler, *To Defend and Deter: The Legacy of the United States Cold War Missile Program*, 415.
- <sup>xxiv</sup> "Ellsworth AFB History," <<http://www.ellsworth.af.mil/history.html>>.
- <sup>xxv</sup> Lonquest and Winkler, *To Defend and Deter: The Legacy of the United States Cold War Missile Program*, 416.



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- xxvi 44<sup>th</sup> Missile Wing Commemorative Committee, *Aggressor Beware: A Brief History of the 44<sup>th</sup> Missile Wing, 1962-1994*, 2-6; George A. Rosenbaum, "Brief History of the 44<sup>th</sup> Strategic Missile Wing," (N.p., n.d.), 2.
- xxvii 44<sup>th</sup> Missile Wing Commemorative Committee, *Aggressor Beware: A Brief History of the 44<sup>th</sup> Missile Wing, 1962-1994*, 2.
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